Hurricane No Name Projected Damage Areas

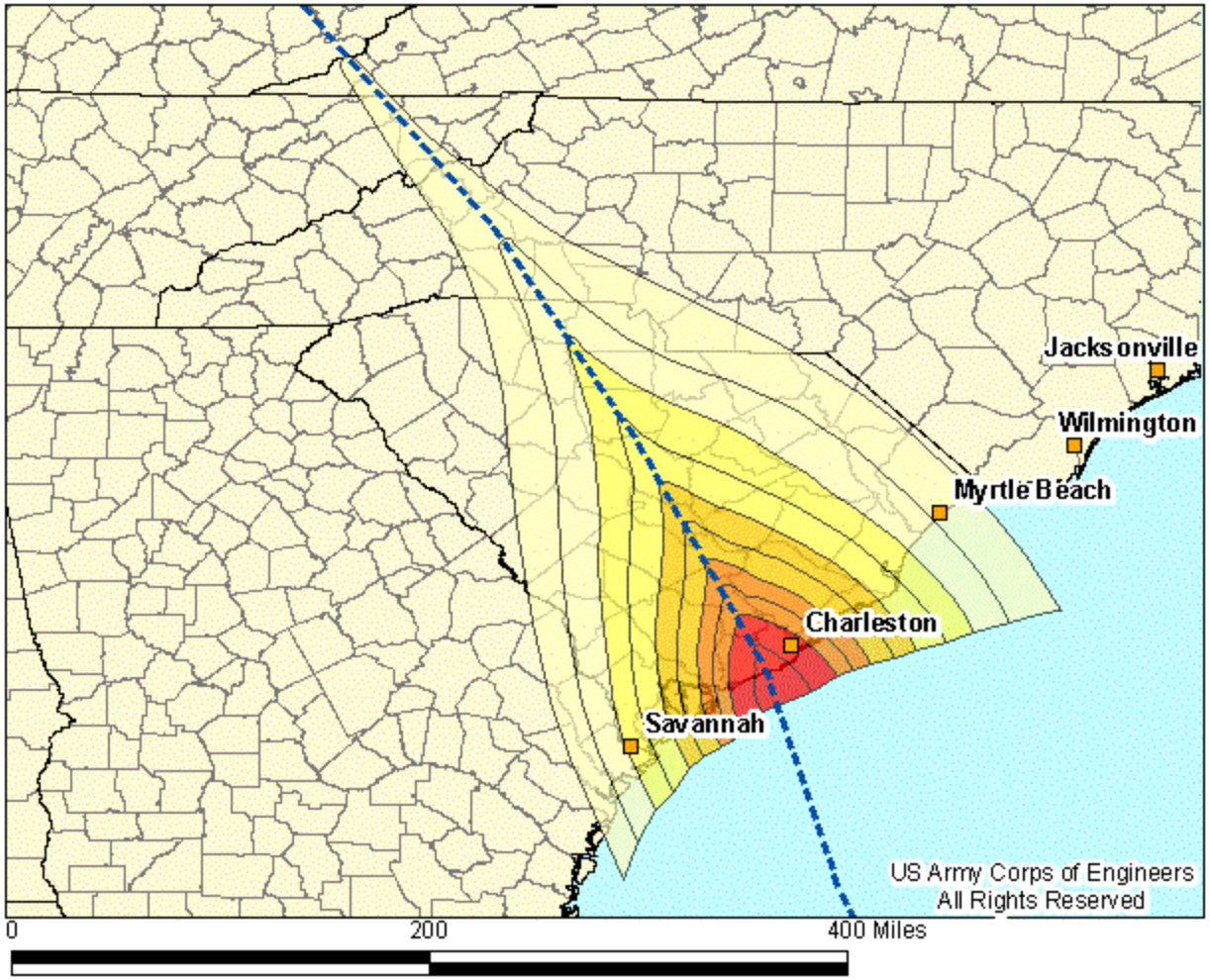
Landfall Has Occurred

US Army Corps of Engineers

For Planning Purposes Only!

Post Landfall Projected Damage Areas

This model is based on a Category 4 storm making landfall near Charleston, SC.



Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Projected Damage Areas

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

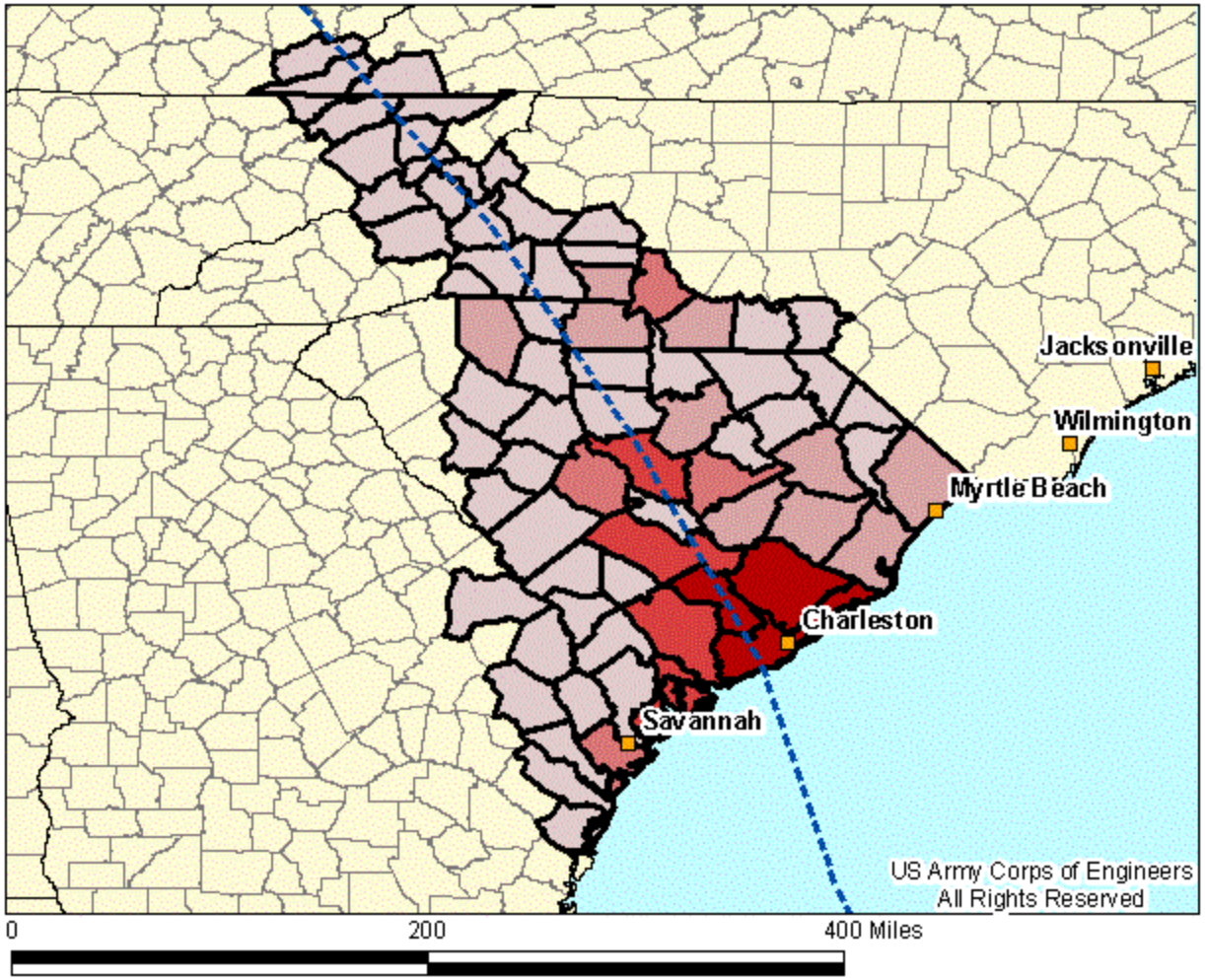
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane No Name Debris Model

Landfall Has Occurred

For Planning Purposes Only!



Post Landfall Debris Model Results

South Carolina - 24,813,000 Yards
North Carolina - 897,000 Yards
Georgia - 386,000 Yards
Tennessee - 50,000 Yards
Virginia - 7,000 Yards

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Debris Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane No Name Debris Model

Landfall Has Occurred

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Georgia		Bryan County	16,000
		Bulloch County	4,000
		Burke County	2,000
		Chatham County	298,000
		Effingham County	52,000
		Liberty County	4,000
		McIntosh County	< 1,000
		Screven County	10,000
Georgia	386,000		
Kentucky		Harlan County	< 1,000
Kentucky			
North Carolina		Anson County	5,000
		Avery County	< 1,000
		Buncombe County	4,000
		Burke County	18,000
		Catawba County	< 1,000
		Cleveland County	81,000
		Gaston County	134,000
		Lincoln County	20,000
		Madison County	< 1,000
		McDowell County	31,000
		Mecklenburg County	404,000
		Mitchell County	10,000
		Polk County	6,000
		Richmond County	< 1,000
		Rutherford County	59,000
		Union County	111,000
		Yancey County	14,000
North Carolina	897,000		

State	Yards per State	County	Yards per County
South Carolina		Aiken County	72,000
		Allendale County	15,000
		Bamberg County	39,000
		Barnwell County	30,000
		Beaufort County	793,000
		Berkeley County	3,841,000
		Calhoun County	77,000
		Charleston County	11,792,000
		Cherokee County	60,000
		Chester County	58,000
		Chesterfield County	39,000
		Clarendon County	176,000
		Colleton County	588,000
		Darlington County	84,000
		Dillon County	13,000
		Dorchester County	3,403,000
		Edgefield County	4,000
		Fairfield County	62,000
		Florence County	181,000
		Georgetown County	148,000
		Greenwood County	< 1,000
		Hampton County	51,000
		Horry County	207,000
		Jasper County	64,000
		Kershaw County	124,000
		Lancaster County	93,000
		Laurens County	10,000
		Lee County	29,000
		Lexington County	450,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Debris Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane No Name Debris Model

Landfall Has Occurred

For Planning Purposes Only!

State	Yards per State	County	Yards per County
South Carolina		Marion County	23,000
(continued)		Marlboro County	13,000
		Newberry County	43,000
		Orangeburg County	609,000
		Richland County	867,000
		Saluda County	13,000
		Spartanburg County	114,000
		Sumter County	301,000
		Union County	38,000
		Williamsburg County	129,000
		York County	160,000
South Carolina	24,813,000		
Tennessee		Greene County	4,000
		Hancock County	< 1,000
		Hawkins County	11,000
		Sullivan County	4,000
		Unicoi County	9,000
		Washington County	22,000
Tennessee	50,000		
Virginia		Lee County	4,000
		Scott County	3,000
Virginia	7,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Debris Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

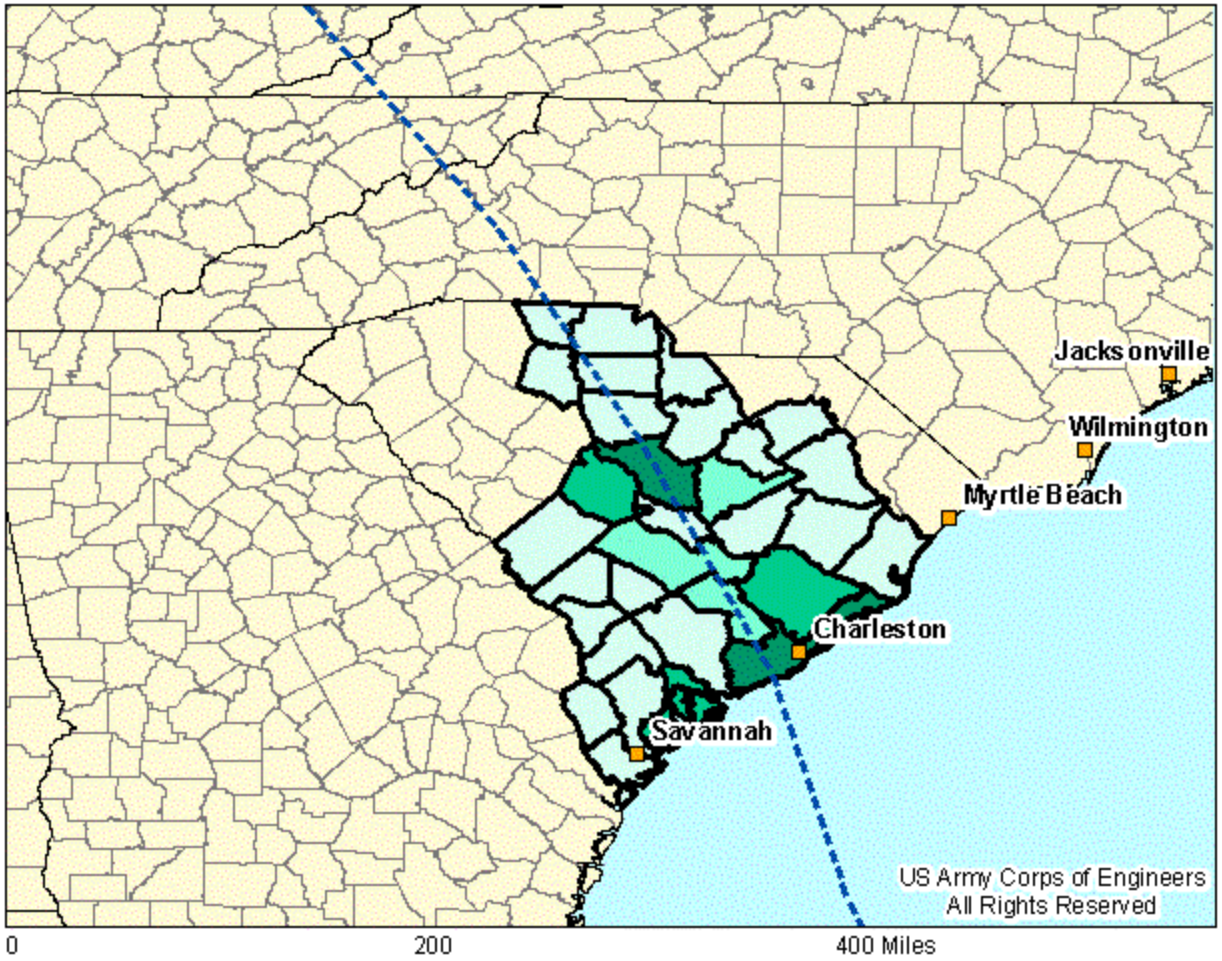
Sources:
HURREVAC
LRL-DEBRIS

Hurricane No Name Commodities Model

Landfall Has Occurred

US Army Corps of Engineers

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
South Carolina – 39/78/155 Truckloads
Georgia – 1/2/4 Truckloads

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC ***(1600 EDT 09/27/2010)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Commodities Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane No Name Commodities Model

Landfall Has Occurred

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Georgia		Chatham County	3
		Effingham County	1
Georgia	4		
South Carolina		Aiken County	1
		Allendale County	1
		Bamberg County	2
		Barnwell County	1
		Beaufort County	11
		Berkeley County	13
		Calhoun County	2
		Charleston County	25
		Cherokee County	1
		Chester County	2
		Clarendon County	3
		Colleton County	3
		Darlington County	1
		Dorchester County	10
		Fairfield County	2
		Florence County	2
		Georgetown County	4
		Hampton County	2
		Jasper County	2
		Kershaw County	4
		Lancaster County	1
		Lee County	2
		Lexington County	14
		Orangeburg County	7
		Richland County	26
		Sumter County	8
		Union County	1

State	Truckloads per State	County	Truckloads per County
South Carolina		Williamsburg County	3
(continued)		York County	1
South Carolina	155		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Commodities Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

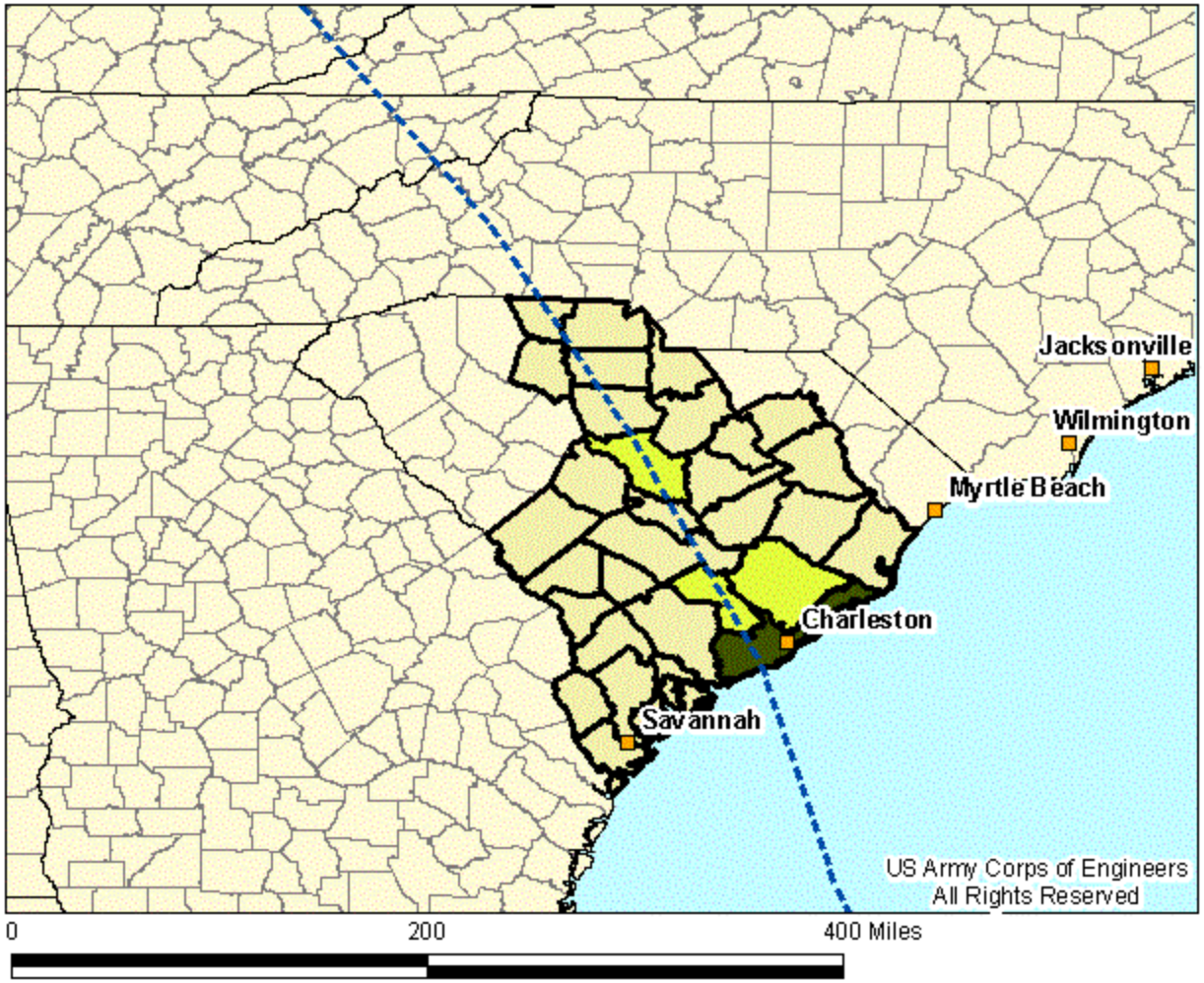
Sources:
HURREVAC
LRL-DEBRIS

Hurricane No Name Temporary Roofing Model

US Army Corps of Engineers

Landfall Has Occurred

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

South Carolina - 25,900
Georgia - 300

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast. Temporary roofing is based on 2% in CAT 1, 4% in CAT 2, 7% in CAT 3 and 12% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Roofing Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 7 of 19

US Army Corps of Engineers

Hurricane No Name Temporary Roofing Model

Landfall Has Occurred

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Georgia		Chatham County	300
		Effingham County	< 100
Georgia	300		
South Carolina		Aiken County	< 100
		Allendale County	< 100
		Bamberg County	200
		Barnwell County	< 100
		Beaufort County	1,500
		Berkeley County	2,700
		Calhoun County	200
		Charleston County	10,700
		Cherokee County	< 100
		Chester County	200
		Clarendon County	400
		Colleton County	700
		Darlington County	< 100
		Dorchester County	3,000
		Fairfield County	200
		Florence County	< 100
		Georgetown County	400
		Hampton County	200
		Jasper County	200
		Kershaw County	400
		Lancaster County	< 100
		Lee County	200
		Lexington County	1,100
		Orangeburg County	600
		Richland County	2,100
		Sumter County	600
		Union County	< 100

State	House Units per State	County	House Units per County
South Carolina		Williamsburg County	300
(continued)		York County	< 100
South Carolina	25,900		

Temporary roofing is based on 2% in CAT 1, 4% in CAT 2, 7% in CAT 3 and 12% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Roofing Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

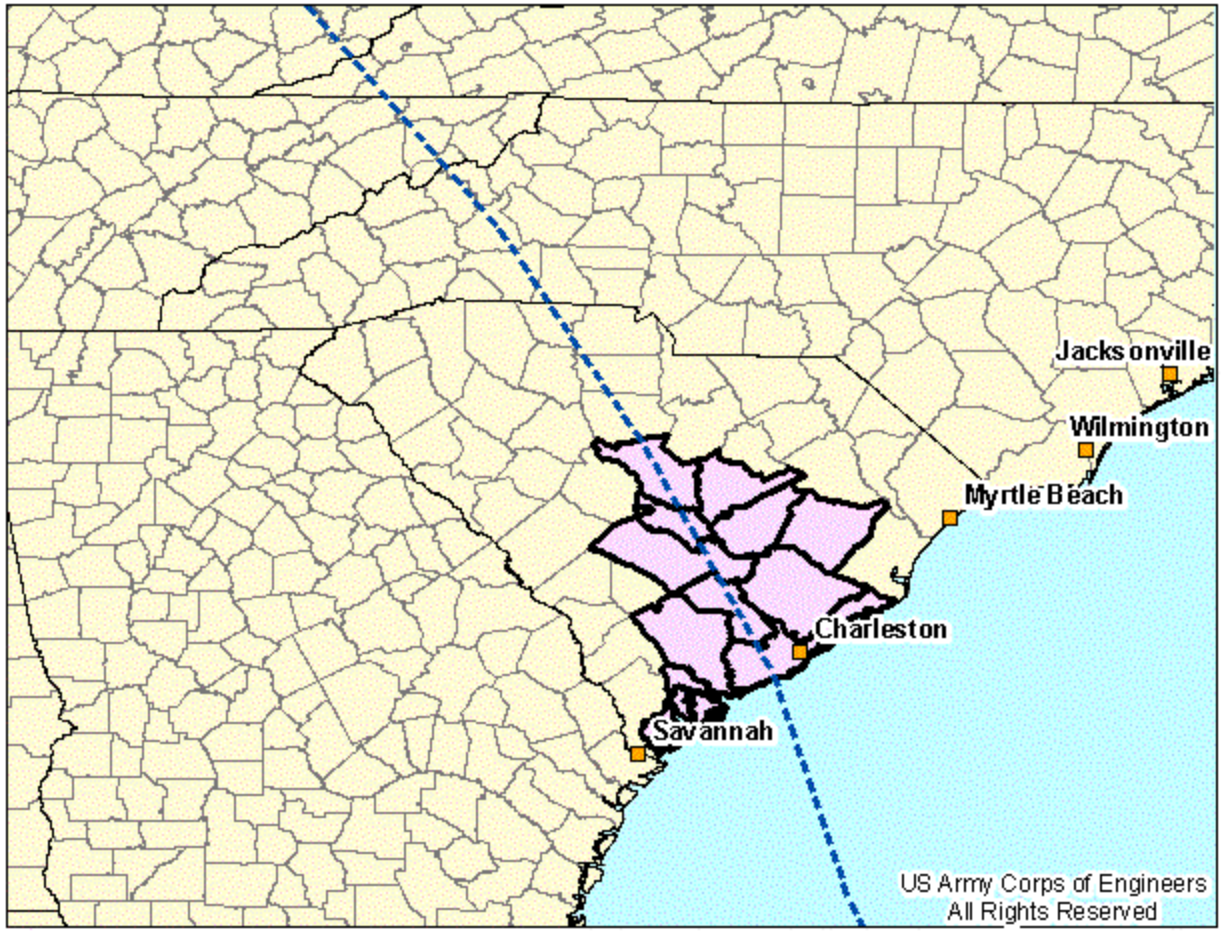
Sources:
HURREVAC
LRL-DEBRIS

Hurricane No Name Temporary Housing Model

US Army Corps of Engineers

Landfall Has Occurred

For Planning Purposes Only!



Post Landfall Temporary Housing Model Results

South Carolina - 800

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast. Temporary housing is based on 0.5% in CAT 2, 0.75% in CAT 3 and 1% in CAT 4. The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Housing Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 9 of 19

US Army Corps of Engineers

Hurricane No Name Temporary Housing Model

Landfall Has Occurred

For Planning Purposes Only!

State	House Units per State	County	House Units per County
South Carolina		Beaufort County	< 100
		Berkeley County	200
		Calhoun County	< 100
		Charleston County	400
		Clarendon County	< 100
		Colleton County	< 100
		Dorchester County	200
		Orangeburg County	< 100
		Richland County	< 100
		Sumter County	< 100
		Williamsburg County	< 100
South Carolina	800		

Temporary housing is based on 0.5% in CAT 2, 0.75% in CAT 3 and 1% in CAT 4.
The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Housing Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

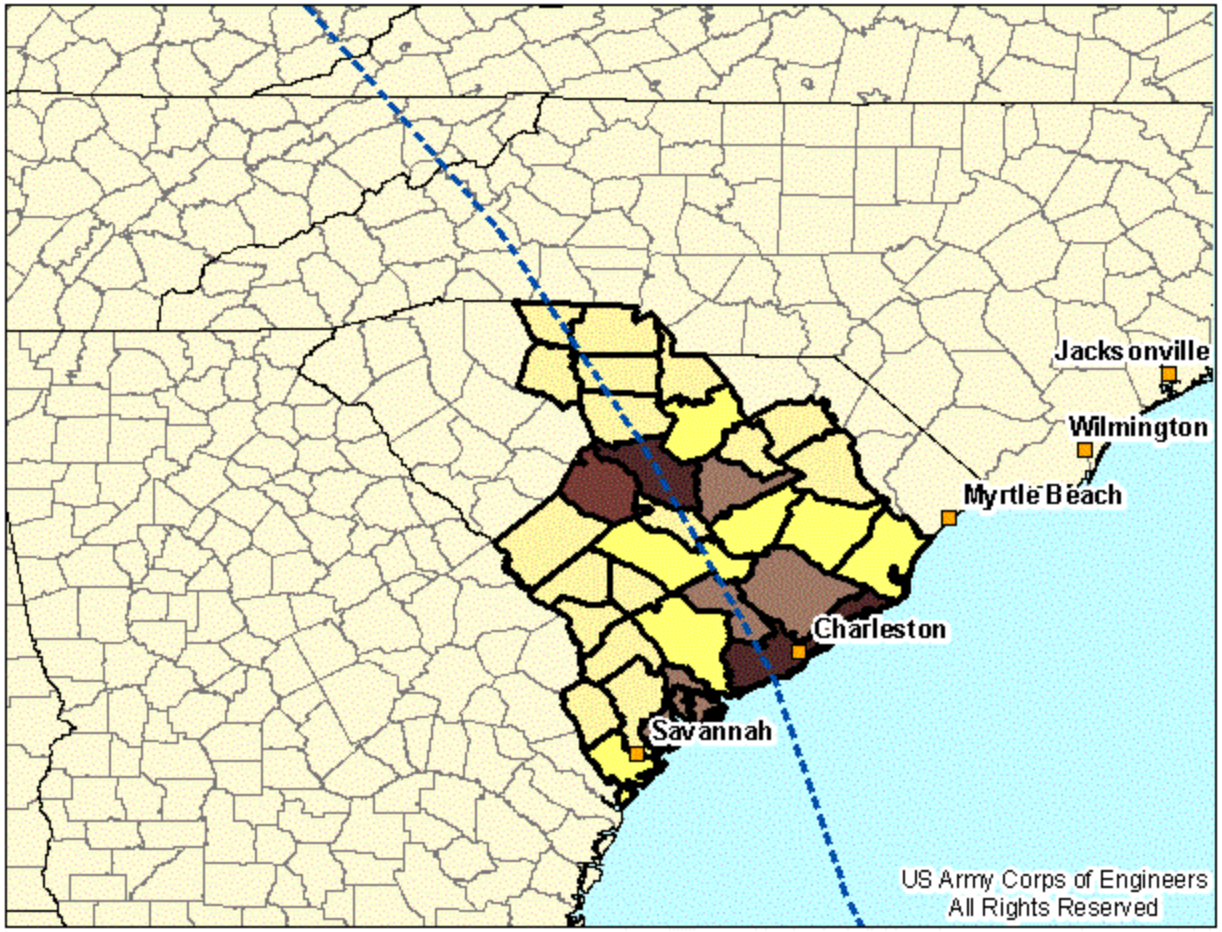
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane No Name Population Model

Landfall Has Occurred

For Planning Purposes Only!



Post Landfall Population Model Results

South Carolina - 1,938,000
Georgia - 39,000

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2009 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Population Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane No Name Population Model

Landfall Has Occurred

For Planning Purposes Only!

State	Population per State	County	Population per County
Georgia		Chatham County	39,000
		Effingham County	< 1,000
Georgia	39,000		
South Carolina		Aiken County	< 1,000
		Allendale County	2,000
		Bamberg County	16,000
		Barnwell County	4,000
		Beaufort County	156,000
		Berkeley County	174,000
		Calhoun County	15,000
		Charleston County	357,000
		Cherokee County	< 1,000
		Chester County	16,000
		Clarendon County	34,000
		Colleton County	40,000
		Darlington County	2,000
		Dorchester County	131,000
		Fairfield County	23,000
		Florence County	18,000
		Georgetown County	48,000
		Hampton County	16,000
		Jasper County	22,000
		Kershaw County	53,000
		Lancaster County	< 1,000
		Lee County	16,000
		Lexington County	195,000
		Orangeburg County	90,000
		Richland County	371,000
		Sumter County	105,000
		Union County	< 1,000

State	Population per State	County	Population per County
South Carolina		Williamsburg County	32,000
(continued)		York County	2,000
South Carolina	1,938,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2009 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Population Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

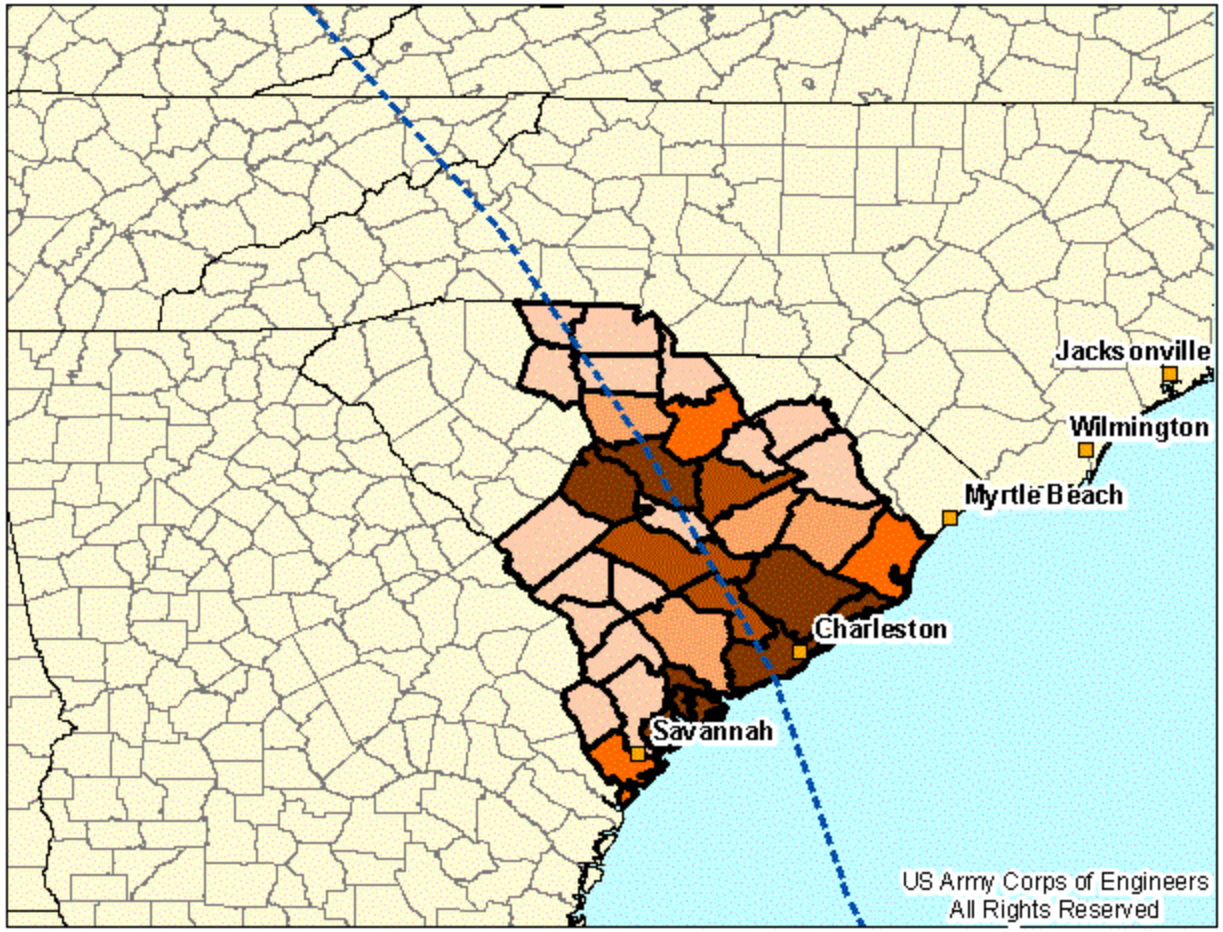
Sources:
HURREVAC
LRL-DEBRIS

Hurricane No Name Households Model

Landfall Has Occurred

US Army Corps of Engineers

For Planning Purposes Only!



Post Landfall Households Model Results

South Carolina - 729,000
Georgia - 16,000

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2009 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Households Model	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane No Name Households Model

Landfall Has Occurred

For Planning Purposes Only!

State	Households per State	County	Households per County
Georgia		Chatham County	16,000
		Effingham County	< 1,000
Georgia	16,000		
South Carolina		Aiken County	< 1,000
		Allendale County	< 1,000
		Bamberg County	6,000
		Barnwell County	2,000
		Beaufort County	59,000
		Berkeley County	61,000
		Calhoun County	6,000
		Charleston County	142,000
		Cherokee County	< 1,000
		Chester County	6,000
		Clarendon County	12,000
		Colleton County	15,000
		Darlington County	< 1,000
		Dorchester County	47,000
		Fairfield County	9,000
		Florence County	7,000
		Georgetown County	18,000
		Hampton County	6,000
		Jasper County	8,000
		Kershaw County	20,000
		Lancaster County	< 1,000
		Lee County	6,000
		Lexington County	76,000
		Orangeburg County	34,000
		Richland County	139,000
		Sumter County	38,000
		Union County	< 1,000

State	Households per State	County	Households per County
South Carolina		Williamsburg County	12,000
(continued)		York County	< 1,000
South Carolina	729,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2009 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane No Name Households Model

Generated By:
Siemsen, LRL 1630 EDT 09/27/2010

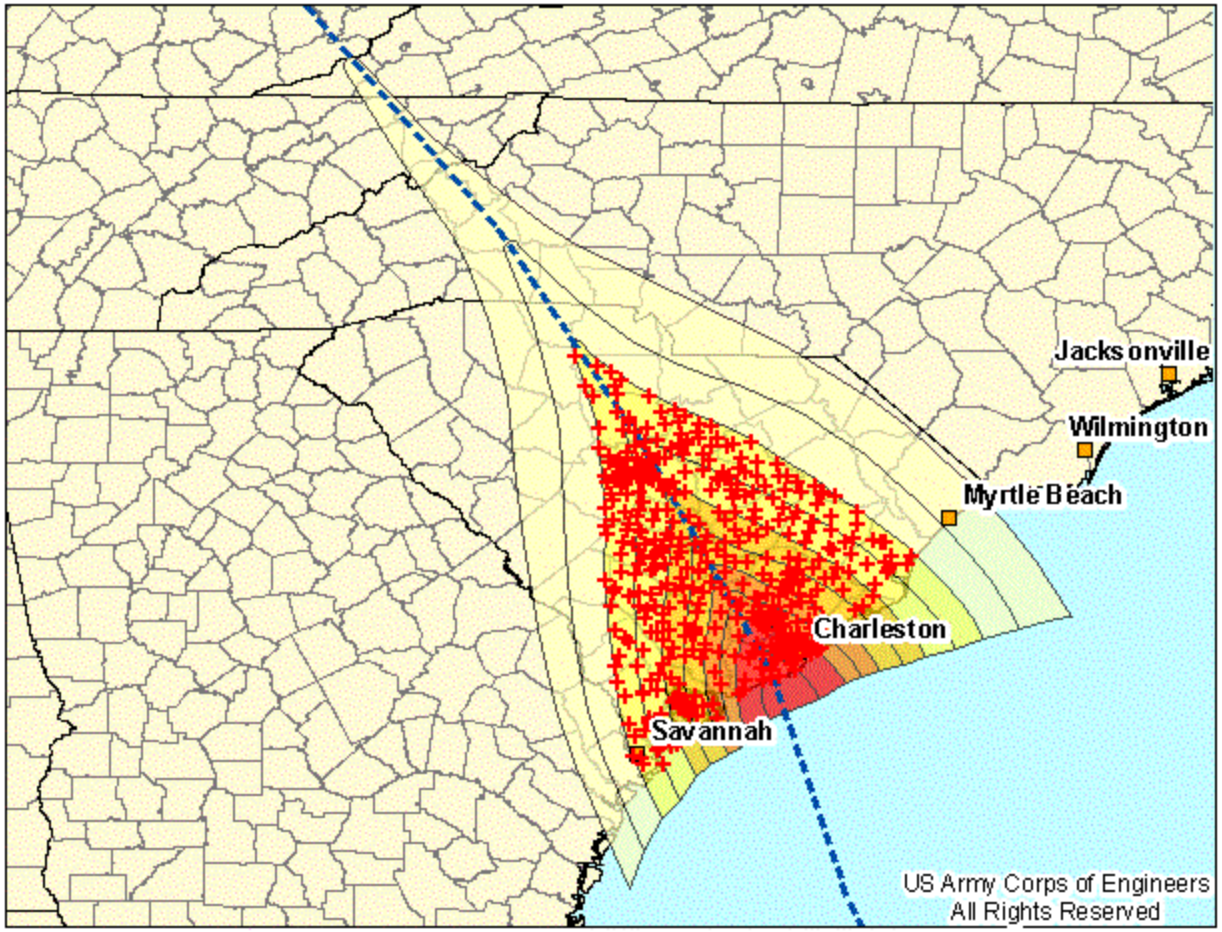
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane No Name Fire Stations

Landfall Has Occurred

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

South Carolina - 453
Georgia - 4

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

\+ Fire Stations
Forecast Track

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2010).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

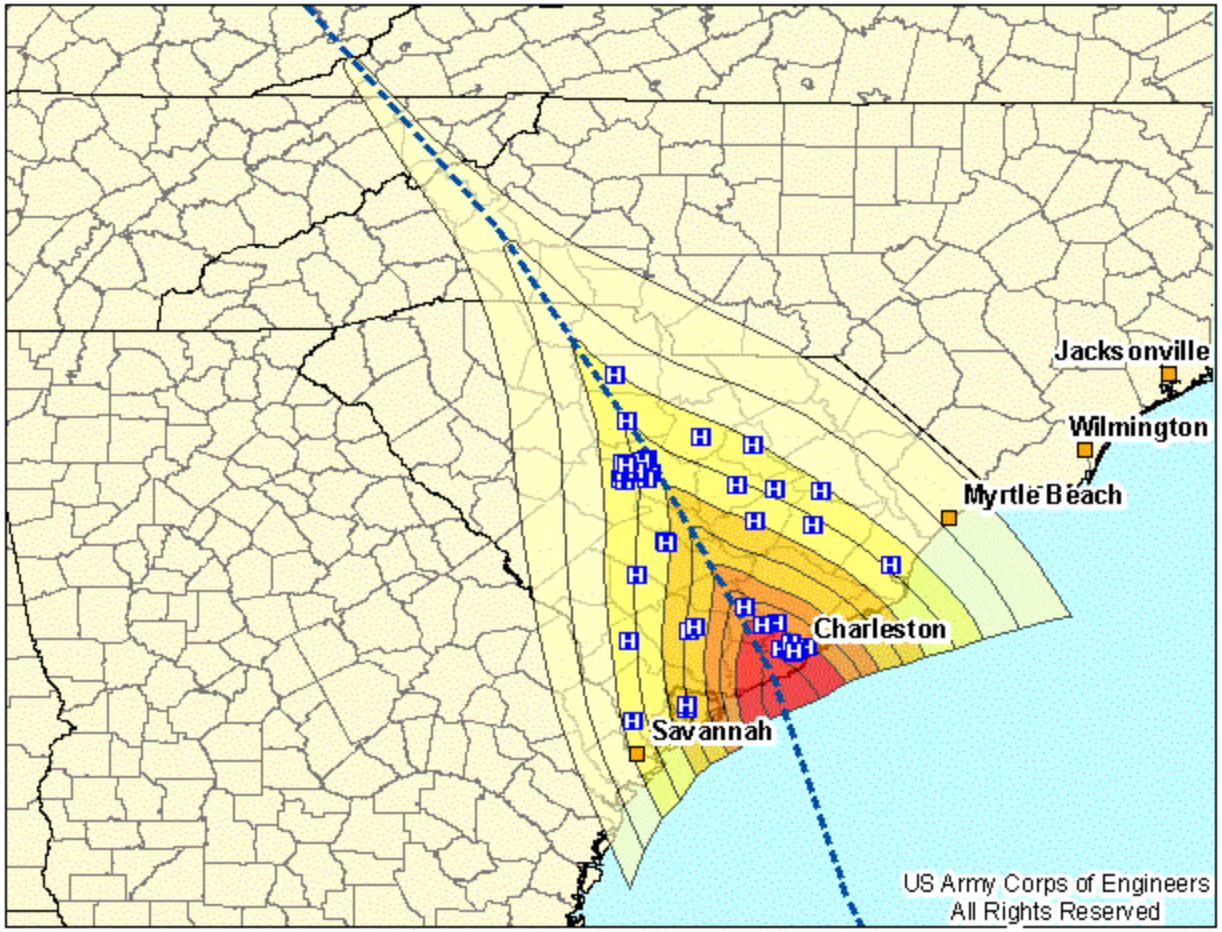
Hurricane No Name Fire Stations	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 19

US Army Corps of Engineers

Hurricane No Name Hospitals

Landfall Has Occurred

For Planning Purposes Only!



Most Probable Landfall Hospitals Inside Hurricane Force Winds

South Carolina - 56

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

H Hospitals

Forecast Track

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2010).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

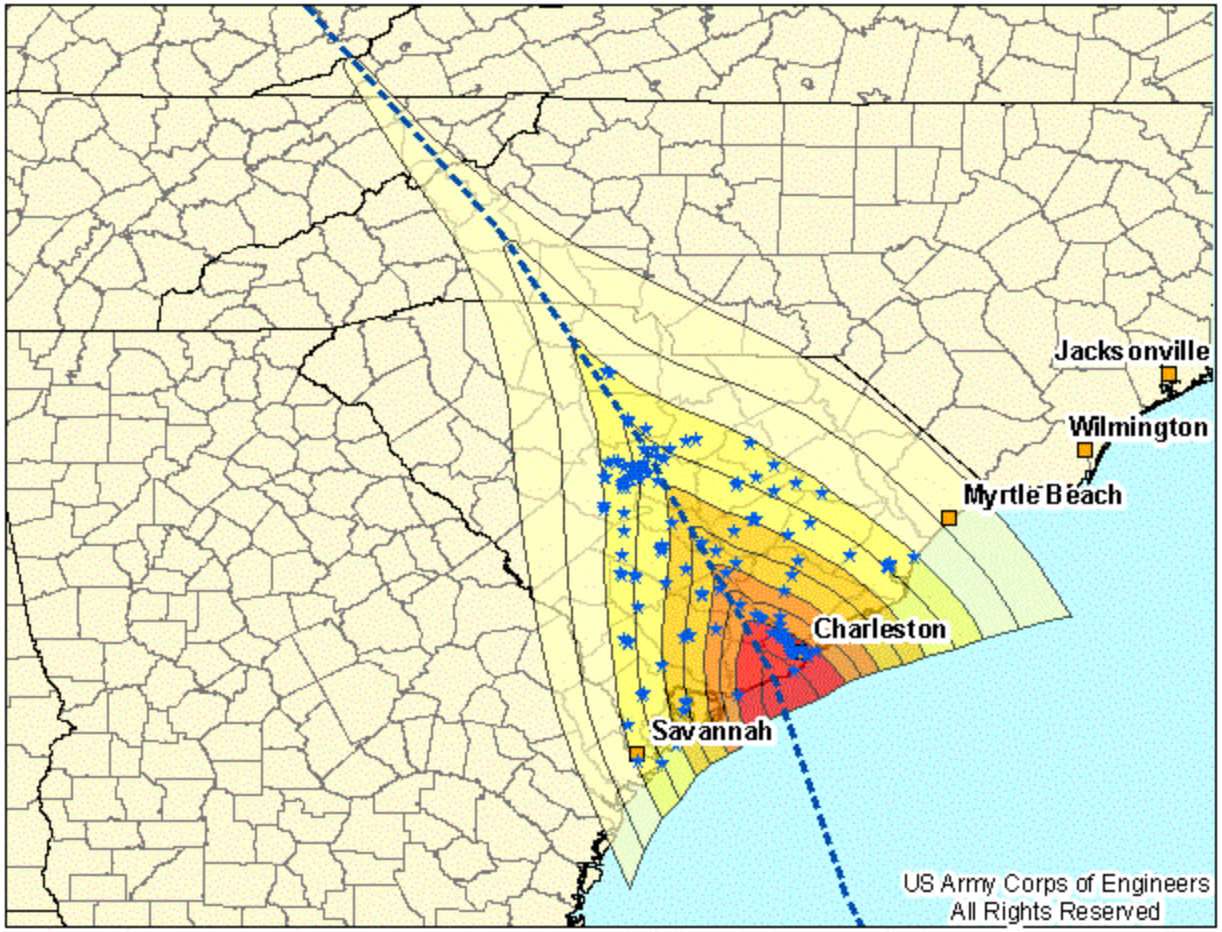
Hurricane No Name Hospitals	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 16 of 19

US Army Corps of Engineers

Hurricane No Name Law Enforcement

Landfall Has Occurred

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

South Carolina - 142
Georgia - 2

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

★ Law Enforcement

Forecast Track

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2010).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

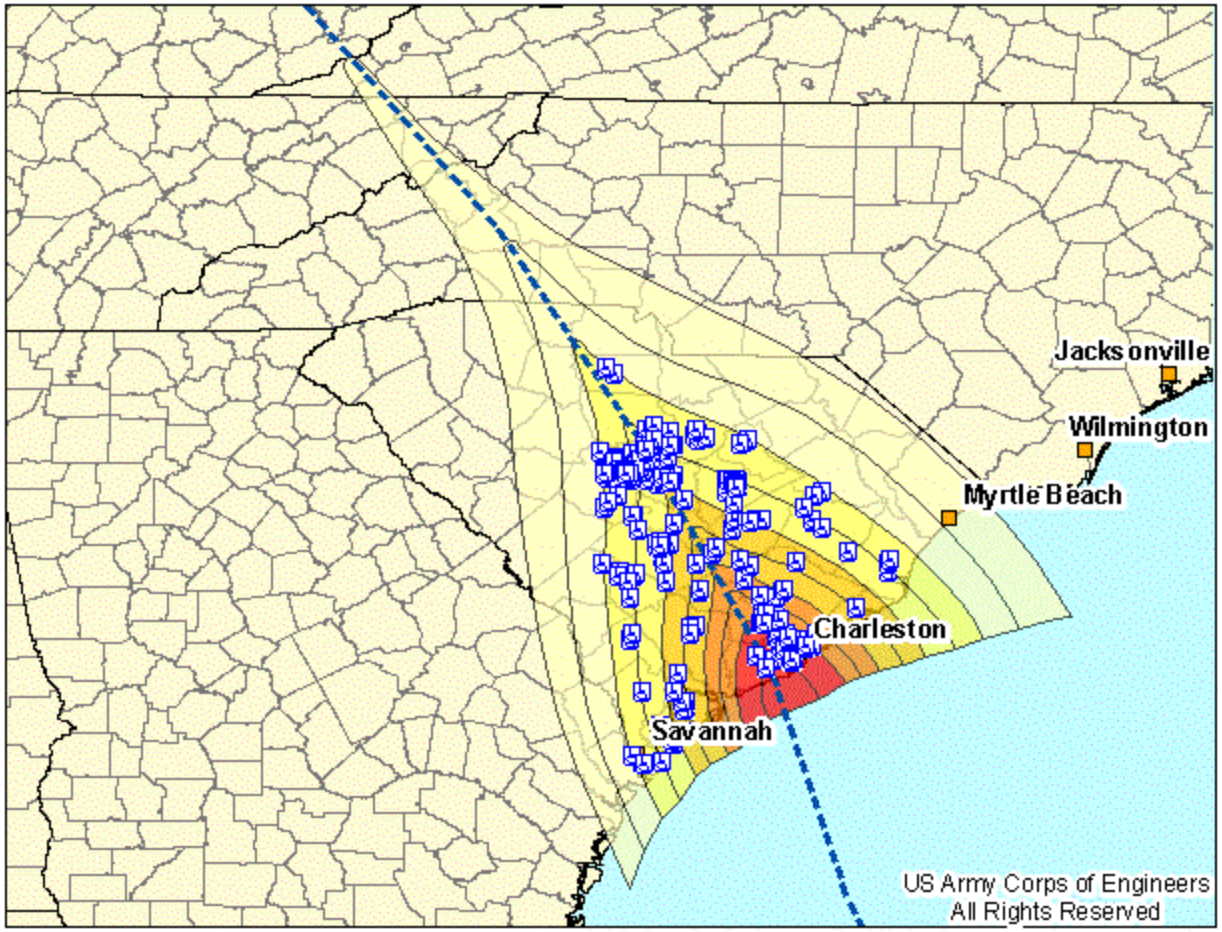
Hurricane No Name Law Enforcement	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 17 of 19

Hurricane No Name Nursing Homes

Landfall Has Occurred

US Army Corps of Engineers

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

South Carolina - 316
Georgia - 6

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Nursing Homes
Forecast Track

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2010).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

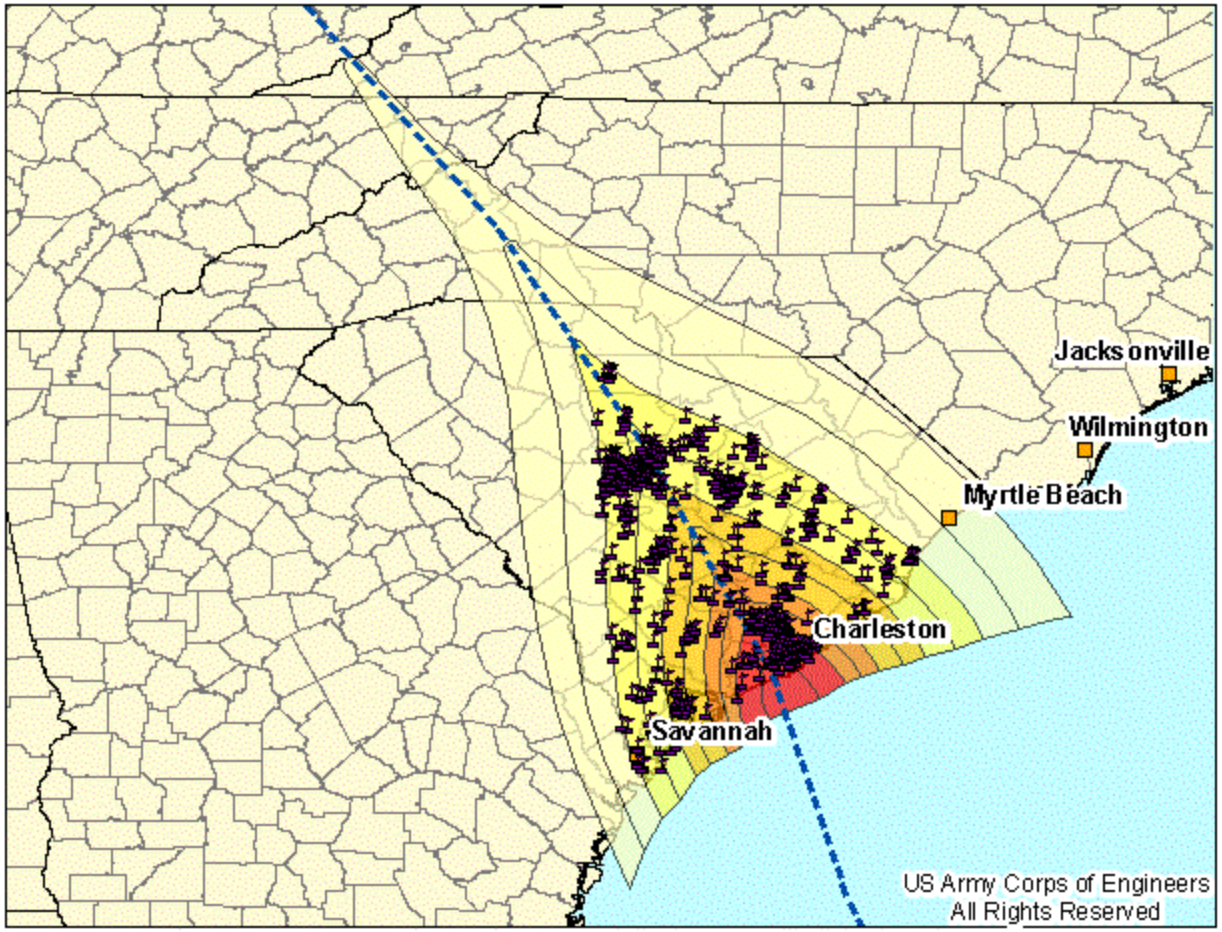
Hurricane No Name Nursing Homes	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 19

US Army Corps of Engineers

Hurricane No Name Schools

Landfall Has Occurred

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

South Carolina - 668
Georgia - 8

Model results per County on following page

This model is based on a Category 4 storm making landfall near Charleston, SC.

Schools
Forecast Track

Information provided on this page displays a Category 4 storm making landfall near Charleston, SC. These projections are based on information from the NHC (1600 EDT 09/27/2010) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2010).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane No Name Schools	
Generated By: Siemsen, LRL 1630 EDT 09/27/2010	
Sources: HURREVAC LRL-DEBRIS	Page 19 of 19